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# 2

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/054,313

DATE: 03/13/2002  
TIME: 10:15:22

Input Set : N:\Crf3\RULE60\10054313.raw  
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1 <110> APPLICANT: Crooke, Stanley T.  
2 Lima, Walter F.  
3 Wu, Hongjiang  
4 <120> TITLE OF INVENTION: Human RNase H Compositions and Uses Thereof  
5 <130> FILE REFERENCE: ISPH-0333  
6 <140> CURRENT APPLICATION NUMBER: 10/054,313  
7 <141> CURRENT FILING DATE: 2001-10-22  
8 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/203,716  
W--> 9 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1998-12-02  
10 <160> NUMBER OF SEQ ID NOS: 12  
11 <170> SOFTWARE: PatentIn Ver. 2.0  
13 <210> SEQ ID NO: 1  
14 <211> LENGTH: 286  
15 <212> TYPE: PRT  
16 <213> ORGANISM: Homo sapiens  
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21 20 25 30  
22 Arg Gly Arg Lys Thr Gly Val Phe Leu Thr Trp Asn Glu Cys Arg Ala  
23 35 40 45  
24 Gln Val Asp Arg Phe Pro Ala Ala Arg Phe Lys Lys Phe Ala Thr Glu  
25 50 55 60  
26 Asp Glu Ala Trp Ala Phe Val Arg Lys Ser Ala Ser Pro Glu Val Ser  
27 65 70 75 80  
28 Glu Gly His Glu Asn Gln His Gly Gln Glu Ser Glu Ala Lys Pro Gly  
29 85 90 95  
30 Lys Arg Leu Arg Glu Pro Leu Asp Gly Asp Gly His Glu Ser Ala Gln  
31 100 105 110  
32 Pro Tyr Ala Lys His Met Lys Pro Ser Val Glu Pro Ala Pro Pro Val  
33 115 120 125  
34 Ser Arg Asp Thr Phe Ser Tyr Met Gly Asp Phe Val Val Val Tyr Thr  
35 130 135 140  
36 Asp Gly Cys Cys Ser Ser Asn Gly Arg Arg Lys Pro Arg Ala Gly Ile  
37 145 150 155 160  
38 Gly Val Tyr Trp Gly Pro Gly His Pro Leu Asn Val Gly Ile Arg Leu  
39 165 170 175  
40 Pro Gly Arg Gln Thr Asn Gln Arg Ala Glu Ile His Ala Ala Cys Lys  
41 180 185 190  
42 Ala Ile Glu Gln Ala Lys Thr Gln Asn Ile Asn Lys Leu Val Leu Tyr  
43 195 200 205  
44 Thr Asp Ser Met Phe Thr Ile Asn Gly Ile Thr Asn Trp Val Gln Gly

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45      210          215          220
46 Trp Lys Lys Asn Gly Trp Lys Thr Ser Ala Gly Lys Glu Val Ile Asn
47    225          230          235          240
48 Lys Glu Asp Phe Val Ala Leu Glu Arg Leu Thr Gln Gly Met Asp Ile
49          245          250          255
50 Gln Trp Met His Val Pro Gly His Ser Gly Phe Ile Gly Asn Glu Glu
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53          275          280          285
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56 <211> LENGTH: 293
57 <212> TYPE: PRT
58 <213> ORGANISM: Gallus sp.
59 <400> SEQUENCE: 2
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63     20          25          30
64 Val Tyr Arg Thr Trp Ala Glu Cys Gln Gln Val Asn Arg Phe Pro
65     35          40          45
66 Ser Ala Ser Phe Lys Lys Phe Ala Thr Glu Lys Glu Ala Trp Ala Phe
67     50          55          60
68 Val Gly Ala Gly Pro Pro Asp Gly Gln Gln Ser Ala Pro Ala Glu Thr
69     65          70          75          80
70 His Gly Ala Ser Ala Val Ala Gln Glu Asn Ala Ser His Arg Glu Glu
71     85          90          95
72 Pro Glu Thr Asp Val Leu Cys Cys Asn Ala Cys Lys Arg Arg Tyr Glu
73     100         105         110
74 Gln Ser Thr Asn Glu Glu His Thr Val Arg Arg Ala Lys His Asp Glu
75     115         120         125
76 Glu Gln Ser Thr Pro Val Val Ser Glu Ala Lys Phe Ser Tyr Met Gly
77     130         135         140
78 Glu Phe Ala Val Val Tyr Thr Asp Gly Cys Cys Ser Gly Asn Gly Arg
79     145         150         155          160
80 Asn Arg Ala Arg Ala Gly Ile Gly Val Tyr Trp Gly Pro Gly His Pro
81     165         170         175
82 Leu Asn Ile Ser Glu Arg Leu Pro Gly Arg Gln Thr Asn Gln Arg Ala
83     180         185         190
84 Glu Ile His Ala Ala Cys Lys Ala Ile Glu Gln Ala Lys Ser Gln Asn
85     195         200         205
86 Ile Lys Lys Leu Ile Ile Tyr Thr Asp Ser Lys Phe Thr Ile Asn Gly
87     210         215         220
88 Ile Thr Ser Trp Val Glu Asn Trp Lys Thr Asn Gly Trp Arg Thr Ser
89     225         230         235          240
90 Ser Gly Gly Ser Val Ile Asn Lys Glu Asp Phe Gln Lys Leu Asp Ser
91     245         250         255
92 Leu Ser Lys Gly Ile Glu Ile Gln Trp Met His Ile Pro Gly His Ala
93     260         265         270
94 Gly Phe Gln Gly Asn Glu Ala Asp Arg Leu Ala Arg Glu Gly Ala

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96	Ser Lys Gln Lys Leu		
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100 <211>	LENGTH: 348		
101 <212>	TYPE: PRT		
102 <213>	ORGANISM: Saccharomyces sp.		
103 <400>	SEQUENCE: 3		
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105	1 5 10 15		
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107	20 25 30		
108	Gly Gly Ala Ile Tyr Lys Lys Phe Asn Ser Tyr Glu Gln Ala Lys Ser		
109	35 40 45		
110	Phe Leu Gly Gln Pro Asn Thr Thr Ser Asn Tyr Gly Ser Ser Thr His		
111	50 55 60		
112	Ala Gly Gly Gln Val Ser Lys Pro His Thr Thr Gln Lys Arg Val His		
113	65 70 75 80		
114	Arg Arg Asn Arg Pro Leu His Tyr Ser Ser Leu Thr Ser Ser Ala		
115	85 90 95		
116	Cys Ser Ser Leu Ser Ser Ala Asn Thr Asn Thr Phe Tyr Ser Val Lys		
117	100 105 110		
118	Ser Asn Val Pro Asn Ile Glu Ser Lys Ile Phe Asn Asn Trp Lys Asp		
119	115 120 125		
120	Cys Gln Ala Tyr Val Lys His Lys Arg Gly Ile Thr Phe Lys Lys Phe		
121	130 135 140		
122	Glu Asp Gln Leu Ala Ala Glu Asn Phe Ile Ser Gly Met Ser Ala His		
123	145 150 155 160		
124	Asp Tyr Lys Leu Met Asn Ile Ser Lys Glu Ser Phe Glu Ser Lys Tyr		
125	165 170 175		
126	Lys Leu Ser Ser Asn Thr Met Tyr Asn Lys Ser Met Asn Val Tyr Cys		
127	180 185 190		
128	Asp Gly Ser Ser Phe Gly Asn Gly Thr Ser Ser Ser Arg Ala Gly Tyr		
129	195 200 205		
130	Gly Ala Tyr Phe Glu Gly Ala Pro Glu Glu Asn Ile Ser Glu Pro Leu		
131	210 215 220		
132	Leu Ser Gly Ala Gln Thr Asn Asn Arg Ala Glu Ile Glu Ala Val Ser		
133	225 230 235 240		
134	Glu Ala Leu Lys Lys Ile Trp Glu Lys Leu Thr Asn Glu Lys Glu Lys		
135	245 250 255		
136	Val Asn Tyr Gln Ile Lys Thr Asp Ser Glu Tyr Val Thr Lys Leu Leu		
137	260 265 270		
138	Asn Asp Arg Tyr Met Thr Tyr Asp Asn Lys Lys Leu Glu Gly Leu Pro		
139	275 280 285		
140	Asn Ser Asp Leu Ile Val Pro Leu Val Gln Arg Phe Val Lys Val Lys		
141	290 295 300		
142	Lys Tyr Tyr Glu Leu Asn Lys Glu Cys Phe Lys Asn Asn Gly Lys Phe		
143	305 310 315 320		
144	Gln Ile Glu Trp Val Lys Gly His Asp Gly Asp Pro Gly Asn Glu Met		

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151 <212> TYPE: PRT
152 <213> ORGANISM: Escherichia coli
153 <400> SEQUENCE: 4
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156      Pro Gly Pro Gly Gly Tyr Gly Ala Ile Leu Arg Tyr Arg Gly Arg Glu
157          20          25          30
158      Lys Thr Phe Ser Ala Gly Tyr Thr Arg Thr Asn Asn Arg Met Glu
159          35          40          45
160      Leu Met Ala Ala Ile Val Ala Leu Glu Ala Leu Lys Glu His Cys Glu
161          50          55          60
162      Val Ile Leu Ser Thr Asp Ser Gln Tyr Val Arg Gln Gly Ile Thr Gln
163          65          70          75          80
164      Trp Ile His Asn Trp Lys Lys Arg Gly Trp Lys Thr Ala Asp Lys Lys
165          85          90          95
166      Pro Val Lys Asn Val Asp Leu Trp Gln Arg Leu Asp Ala Ala Leu Gly
167          100         105         110
168      Gln His Gln Ile Lys Trp Glu Trp Val Lys Gly His Ala Gly His Pro
169          115         120         125
170      Glu Asn Glu Arg Cys Asp Glu Leu Ala Arg Ala Ala Ala Met Asn Pro
171          130         135         140
172      Thr Leu Glu Asp Thr Gly Tyr Gln Val Glu Val
173          145         150         155
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177 <212> TYPE: PRT
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179 <400> SEQUENCE: 5
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181          1           5           10          15
182      Pro Gly Val Phe Leu Ser Trp Ser Glu Cys Lys Ala Gln Val Asp Arg
183          20          25          30
184      Phe Pro Ala Ala Arg Phe Lys Lys Phe Ala Thr Glu Asp Glu Ala Trp
185          35          40          45
186      Ala Phe Val Arg Ser Ser Ser Pro Asp Gly Ser Lys Gly Gln Glu
187          50          55          60
188      Ser Ala His Glu Gln Lys Ser Gln Ala Lys Thr Ser Lys Arg Pro Arg
189          65          70          75          80
190      Glu Pro Leu Val Val Val Tyr Thr Asp Gly Cys Cys Ser Ser Asn Gly
191          85          90          95
192      Arg Lys Arg Ala Arg Ala Gly Ile Gly Val Tyr Trp Gly Pro Gly His
193          100         105         110
194      Pro Leu Asn Val Arg Ile Arg Leu Pro Gly Arg Gln Thr Asn Gln Arg
195          115         120         125

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196 Ala Glu Ile His Ala Ala Cys Lys Ala Val Met Gln Ala Lys Ala Gln
197 130 135 140
198 Asn Ile Ser Lys Leu Val Leu Tyr Thr Asp Ser Met Phe Thr Ile Asn
199 145 150 155 160
200 Gly Ile Thr Asn Trp Val Gln Gly Trp Lys Lys Asn Gly Trp Arg Thr
201 165 170 175
202 Ser Thr Gly Lys Asp Val Ile Asn Lys Glu Asp Phe Met Glu Leu Asp
203 180 185 190
204 Glu Leu Thr Gln Gly Met Asp Ile Gln Trp Met His Ile Pro Gly His
205 195 200 205
206 Ser Gly Phe Val Gly Asn Glu Glu
207 210 215
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212 <213> ORGANISM: Artificial Sequence
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221 <213> ORGANISM: Artificial Sequence
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237 <211> LENGTH: 29
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
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246 <211> LENGTH: 29
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:

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**VERIFICATION SUMMARY****PATENT APPLICATION:** US/10/054,313**DATE:** 03/13/2002**TIME:** 10:15:23**Input Set :** N:\Crf3\RULE60\10054313.raw  
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